

=> FILE REG
FILE 'REGISTRY' ENTERED ON 30 APR 2008
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=> D HIS

FILE 'LREGISTRY' ENTERED ON 30 APR 2008
L1 STR

FILE 'REGISTRY' ENTERED ON 30 APR 2008
L2 SCR 2043
L3 0 S L1 AND L2

FILE 'LREGISTRY' ENTERED ON 30 APR 2008
L4 STR L1

FILE 'REGISTRY' ENTERED ON 30 APR 2008
L5 0 S L4 AND L2

FILE 'HCAPLUS' ENTERED ON 30 APR 2008
L6 2806 S IWASHITA ?/AU
L7 3546 S TACHIKAWA ?/AU
L8 13 S L6 AND L7
L9 48 S IWASHITA J?/AU
L10 552 S TACHIKAWA T?/AU
L11 6 S L9 AND L10
SEL L11 1-6 RN

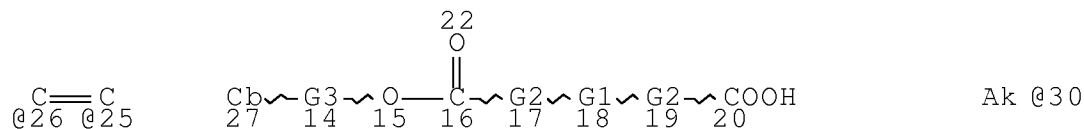
FILE 'REGISTRY' ENTERED ON 30 APR 2008
L12 34 S E1-E34
L13 24 S L12 AND PMS/CI
L14 25 S L4 AND L2 FUL
SAV L14 TH0849/A

FILE 'CAOLD' ENTERED ON 30 APR 2008
L15 0 S L14

FILE 'ZCA' ENTERED ON 30 APR 2008
L16 16 S L14
L17 12 S 1840-2004/PY,PRY,AY AND L16

FILE 'REGISTRY' ENTERED ON 30 APR 2008

L2 SCR 2043
L4 STR



DEFAULT ECLEVEL IS LIMITED

NUMBER OF NODES IS 12

L14 25 SEA FILE=REGISTRY SSS FUL L4 AND L2

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100.0% PROCESSED    74486 ITERATIONS
SEARCH TIME: 00.00.02
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25 ANSWERS

COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> D L17 1-12 BIB ABS HITSTR HITRNL

L17 ANSWER 1 OF 12 ZCA COPYRIGHT 2008 ACS on STN
AN 143:413506 ZCA Full-text

TI Top coat composition for photoresist containing fluoroalcohol
 group-bearing polymer
 IN Maeda, Kazuhiko; Komoriya, Haruhiko; Sumida, Shinichi; Miyazawa,
 Satoru; Michitaka, Ootani
 PA Central Glass Company, Limited, Japan
 SO PCT Int. Appl., 37 pp.
 CODEN: PIXXD2

DT Patent
 LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005098541	A1	20051020	WO 2005-JP5113	20050322

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR,
 KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
 MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
 VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
 DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC,
 NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
 GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2005316352	A	20051110	JP 2004-201439	20040708
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US 20050250898	A1	20051110	US 2004-980769	20041104
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EP 1720067	A1	20061108	EP 2005-727061	20050322
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R: DE, FR, GB				
KR 2007007093	A	20070112	KR 2006-717757	20060901

KR 800397	B1	20080201		
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PRAI JP 2004-104885 A 20040331 <--
 JP 2004-201439 A 20040708 <--
 WO 2005-JP5113 W 20050322

AB A top coat compn., characterized in that a polymer contg. at least one structure represented by the formula I-III (R1 = H, F, etc.; R2 = O, COO, etc.; R3 = CH, OH, etc.; R4 = Me, trifluoromethyl, etc.; R5 = H, protective group; n = 1, 2; m = 0, 1; and R6 = alicyclic group, Ph) is used and is applied on the upper surface of a photoresist; and a top coat compn. soln. which is prepd. by dissolving the top coat compn. in an org. solvent. The top coat compn. and the top coat compn. soln. can be suitably used for immersion lithog.

IT 867260-76-2P
 (Top coat compn. for photoresist contg. fluoroalc. group-bearing polymer)

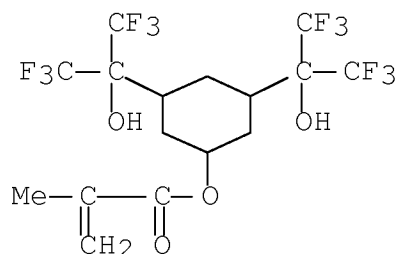
RN 867260-76-2 ZCA

CN 2-Butenedioic acid (2Z)-, mono(tricyclo[3.3.1.1^{3,7}]dec-2-yl) ester, polymer with 3,5-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 781637-36-3

CMF C16 H16 F12 O4

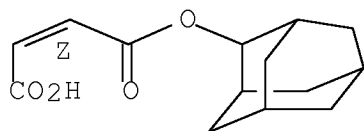


CM 2

CRN 213819-89-7

CMF C14 H18 O4

Double bond geometry as shown.



IT 867260-76-2P

(Top coat compn. for photoresist contg. fluoroalc. group-bearing polymer)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 141:358076 ZCA Full-text

TI Negative resist composition and formation of resist patterns

IN Iwashita, Jyun; Tachikawa, Toshikazu

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004088427	A1	20041014	WO 2004-JP4080	20040324

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2004318080 A 20041111 JP 2004-51608

20040226

<--

US 20060134545

A1

20060622

US 2005-549849

200512

12

<--

PRAI JP 2003-92767 A 20030328 <--

JP 2004-51608 A 20040226 <--

WO 2004-JP4080 W 20040324 <--

AB Title neg. resist compn. contains a polymer comprising as a monomer component one member selected from among dicarboxylic monoesters. The compn. can form a resist pattern having improved resistances to dry etching and electron beam from a scanning electron microscope (SEM), while the soly. in an alk. developing soln. is maintained. A patterning process using the photoresist is also claimed.

IT 775342-68-2F 775342-69-3P

(neg. resist compn. with improved resistance to dry etching and electron beam)

RN 775342-68-2 ZCA

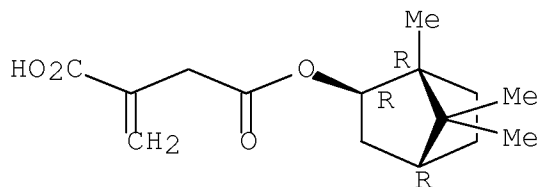
CN Butanedioic acid, methylene-, 4-[(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl] ester, rel-, polymer with ethyl 2-(hydroxymethyl)-2-propenoate and methyl 2-(hydroxymethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 775342-67-1

CMF C15 H22 O4

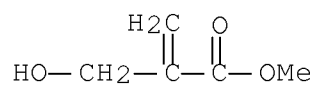
Relative stereochemistry.



CM 2

CRN 15484-46-5

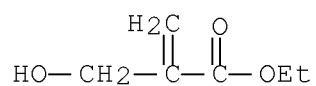
CMF C5 H8 O3



CM 3

CRN 10029-04-6

CMF C6 H10 O3



RN 775342-69-3 ZCA

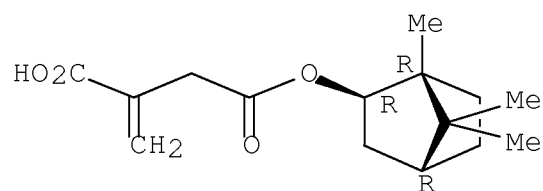
CN Butanedioic acid, methylene-, 4-[(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl] ester, polymer with methyl 2-(hydroxymethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 775342-67-1

CMF C15 H22 O4

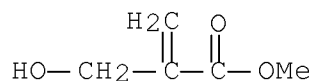
Relative stereochemistry.



CM 2

CRN 15484-46-5

CMF C5 H8 O3



IT 775342-68-2P 775342-69-3P

(neg. resist compn. with improved resistance to dry etching and electron beam)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 141:358074 ZCA Full-text

TI Dicarboxylic acid monoester compound, method for producing same and polymer thereof

IN Iwashita, Jyun; Tachikawa, Toshikazu; Yoshida, Masatoshi; Arakawa, Motohiro; Ugamura, Tadayoshi

PA Tokyo Ohka Kogyo Co., Ltd., Japan; Nippon Shokubai Co., Ltd.

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2004087636	A1	20041014	WO 2004-JP4081	20040324

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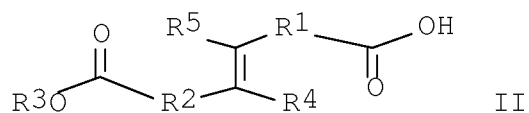
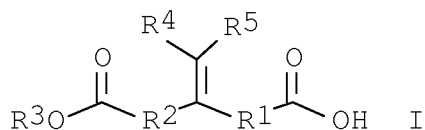
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2004315791 A 20041111 JP 2004-51607

20040226

PRAI JP 2003-92766 A 20030328 <--
 JP 2004-51607 A 20040226 <--
 OS MARPAT 141:358074
 GI

<--



AB A dicarboxylic acid monoester compd. is disclosed which is represented by I or II (R1,2 = alkyl chains having 0-8 carbon atoms; R3 = substituent having at least two or more alicyclic structures; and R4,5 = hydrogen atoms or alkyl groups having 1-8 carbon atoms). A method for producing such a dicarboxylic acid monoester compd. and a polymer obtained from such a compd. are also disclosed. The dicarboxylic acid monoester compd. is useful as a resist material.

IT 757235-78-2F

(dicarboxylic acid monoester compd. for resist compn.)

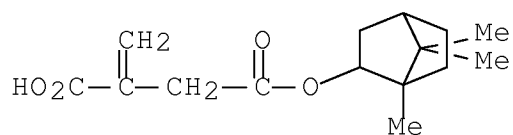
RN 757235-78-2 ZCA

CN Butanedioic acid, methylene-, 4-(1,7,7-trimethylbicyclo[2.2.1]hept-2-yl) ester, polymer with ethyl 2-(hydroxymethyl)-2-propenoate and methyl 2-(hydroxymethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 757235-77-1

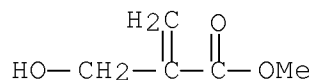
CMF C15 H22 O4



CM 2

CRN 15484-46-5

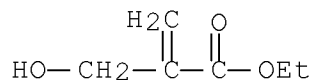
CMF C5 H8 O3



CM 3

CRN 10029-04-6

CMF C6 H10 O3



IT 757235-78-2P

(dicarboxylic acid monoester compd. for resist compn.)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 141:285801 ZCA Full-text

TI Resist material for liquid immersion lithography process and method
of forming resist pattern with the resist material

IN Iwashita, Jyun; Hirayama, Taku; Tachikawa, Toshikazu

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2004079453 A1 20040916 WO 2004-JP2752 200403
04

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CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NA, NI, NO
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT,
BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG,
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
JP 2004325466 A 20041118 JP 2003-92769

200303
28

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EP 1600813 A1 20051130 EP 2004-717245 200403
04

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
PL, SK
CN 1756994 A 20060405 CN 2004-80005913 200403
04

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TW 273348 B 20070211 TW 2004-93105731 200403
04

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US 20060110676 A1 20060525 US 2006-545915 200601
17

<--

PRAI JP 2003-57766 A 20030304 <--
JP 2003-92769 A 20030328 <--
WO 2004-JP2752 W 20040304 <--

OS MARPAT 141:285801

AB A neg. resist material for liq. immersion exposure process comprises
a resin component and a crosslinking agent component for the resin
component, wherein the soly. of the crosslinking agent component in
liq. immersion medium is sparing. A method of forming resist pattern
therewith is also claimed. Thus, in liq. immersion exposure
processes, esp. a liq. immersion exposure process wherein exposure is
carried out while on a path along which lithog. exposure light

reaches a resist film at least on the resist film there is disposed a liq. of given thickness having a refractive index higher than that of air and lower than that of the resist film to thereby enhance the resolu. of resist pattern, not only the degeneration of the resist film but also the degeneration of the disposed liq. during the liq. immersion exposure can be prevented, so that formation of high-resolu. resist pattern by the liq. immersion exposure can be realized.

IT 757235-78-2

(resist material for liq. immersion lithog. process)

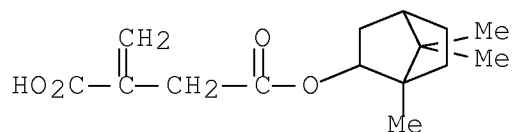
RN 757235-78-2 ZCA

CN Butanedioic acid, methylene-, 4-(1,7,7-trimethylbicyclo[2.2.1]hept-2-yl) ester, polymer with ethyl 2-(hydroxymethyl)-2-propenoate and methyl 2-(hydroxymethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 757235-77-1

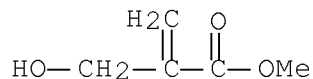
CMF C15 H22 O4



CM 2

CRN 15484-46-5

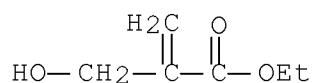
CMF C5 H8 O3



CM 3

CRN 10029-04-6

CMF C6 H10 O3



IT 757235-78-2

(resist material for liq. immersion lithog. process)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 139:330321 ZCA Full-text

TI Positive-working chemically amplified photoresist composition
containing specific polymer

IN Sasaki, Tomoya; Mizutani, Kazuyoshi; Kanna, Shinichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 65 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	
PI	JP 2003295442	A	20031015	JP 2002-101462	20020403

<--

PRAI JP 2002-101462 20020403 <--

AB The title compn. contains an acid-sensitive polymer, wherein the polymer contains repeating unit [-C(R(I)-1)(R(I)-2)-C(R(I)-3)(R(I)-4)], [-C(R(II)-1)(R(II)-2)-C(R(II)-3)(R(II)-4)], and one of following repeating units: [-C(R(IIIa)-1)(R(IIIa)-2)-C(R(IIIa)-3)(-L-Va)]; [-C(R(IIIb)-1)(-L2-V2a)-C(R(IIIb)-3)(-L1-V1a)]; [-Q(Rb)1(-L3-V3a)] (R(I)-1-4 = H, F, Cl, Br, alkyl, etc.; R(II)-1-3 = H, alkyl; R(II)-4 = alkyl; L1-3 = 2-valent connecting group; Va, V1a, V3a = acid-sensitive group; V2a = H, -R, -OR, etc.; R = alkyl; Q = alicyclic hydrocarbon; Rb = H, alkyl, halo; l = 0-3 integer). The compn. generates decreased amt. of particles in the soln. and provides photoresist of good transparency towards ≤160 nm light, high sensitivity, and good contrast.

IT 612836-94-9P

(resin in pos.-working chem. amplified photoresist compn.)

RN 612836-94-9 ZCA

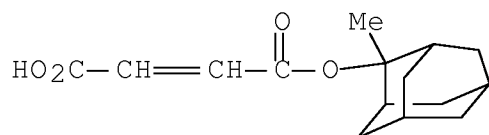
CN 2-Butenedioic acid, mono(2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl)

ester, polymer with 1-(ethenyloxy)butane and tetrafluoroethene (9CI)
(CA INDEX NAME)

CM 1

CRN 212580-28-4

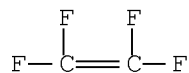
CMF C15 H20 O4



CM 2

CRN 116-14-3

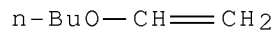
CMF C2 F4



CM 3

CRN 111-34-2

CMF C6 H12 O



IT 612836-94-9F

(resin in pos.-working chem. amplified photoresist compn.)

L17 ANSWER 6 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 136:348304 ZCA [Full-text](#)

TI Positive photosensitive composition

IN Kodama, Kunihiro; Aoi, Toshiaki

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 148 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 1199603	A1	20020424	EP 2001-124329	200110 19
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	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2002131897	A	20020509	JP 2000-321128	200010 20
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	JP 2002214774	A	20020731	JP 2001-132546	200104 27
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	US 20020102491	A1	20020801	US 2001-978103	200110 17
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	US 6749987	B2	20040615		
	TW 536663	B	20030611	TW 2001-90125903	200110 19
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	KR 795872	B1	20080121	KR 2001-64821	200110 19
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	US 20070003871	A1	20070104	US 2006-512173	200608 30
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PRAI	JP 2000-321128	A	20001020	<--	
	JP 2000-352899	A	20001120	<--	
	JP 2001-132546	A	20010427	<--	
	US 2001-978103	A3	20011017	<--	

US 2004-860054 A3 20040604 <--

AB A pos. photosensitive compn. comprises a compd. capable of generating a specified sulfonic acid upon irradiation with one of an actinic ray and radiation and a resin capable of decomposing under the action of an acid to increase the solubility in an alkali developer.

IT 415920-54-6

(photo-acid generator used in pos. photoresist compn.)

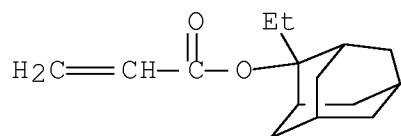
RN 415920-54-6 ZCA

CN Cholan-24-oic acid, 3-[(3-carboxy-1-oxo-2-propenyl)oxy]-, (3 α ,5 β)-, polymer with 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 303186-14-3

CMF C15 H22 O2



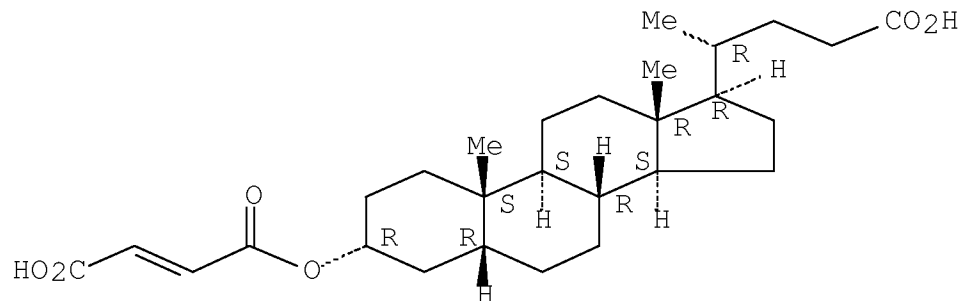
CM 2

CRN 212580-39-7

CMF C28 H42 O6

Absolute stereochemistry.

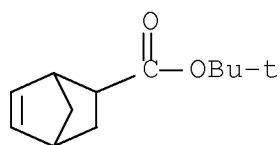
Double bond geometry unknown.



CM 3

CRN 154970-45-3

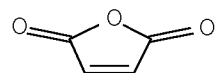
CMF C12 H18 O2



CM 4

CRN 108-31-6

CMF C4 H2 O3



IT 415920-54-6

(photo-acid generator used in pos. photoresist compn.)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 132:173393 ZCA Full-text

TI Alkali-developing positive photosensitive resin compositions

IN Kodama, Kunihiro; Sato, Kenichiro; Aogo, Toshiaki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN: JKXXAF

DT Patent

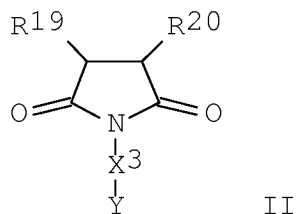
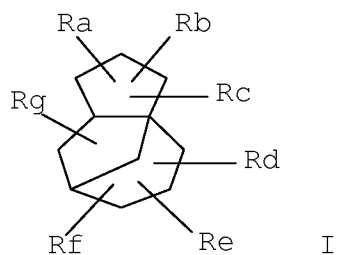
LA Japanese

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2000047386	A	20000218	JP 1998-211137	

				199807 27
			<--	
KR 2000011988	A	20000225	KR 1999-30510	
				199907 27
			<--	
US 6291130	B1	20010918	US 1999-361568	
				199907 27
			<--	
US 6517991	B1	20030211	US 2000-606681	
				200006 30
			<--	
US 20030044718	A1	20030306	US 2002-176067	
				200206 21
			<--	
US 20040161697	A2	20040819		
US 6818377	B2	20041116		
PRAI JP 1998-211137	A	19980727	<--	
JP 1998-263392	A	19980917	<--	
JP 1999-6662	A	19990113	<--	
JP 1999-186809	A	19990630	<--	
US 1999-361568	A3	19990727	<--	
US 2000-606681	A3	20000630	<--	
GI				



AB The compns. contain (A) compds. generating acid by irradiation of active light beam or radiation and (B) acid-decomposable alkali-developing

resin having ≥ 1 polycyclic aliph. group(s) I (Ra-g = (cyclo)alkyl, alkenyl, alkynyl, halo, cyano, R6OR7, R8CO2R9, R10CONR11R12, R13OCOR14, may be substituted; R7, R9 = H, (cyclo)alkyl, alkenyl, groups increasing soly. in alk. developing agent by decompn. with acid, may be substituted; R11-12, R14 = H, (cyclo)alkyl, alkenyl, may be substituted; R11 + R12 may form a ring; R6, R8, R10, R13 = single bond, (cyclo)alkylene, alkenylene, may be substituted; Ra-g may be :O, :S when bonded on same C, may bond when on neighboring Cs, may form rings). The acid-decomposable alkali-developing resin may have structural repeating units (CH2CR15X1Y), (CR16R17CR18X2Y), or II (R15, R16, R18-20 = H, halo, cyano, (halo)alkyl; R17 = cyano, CO2R27, CONR28R29; X1-3 = single bond, may be substituted, (cyclo)alkylene, alkenylene, O, SO2, OCOR30, CO2R31, CONR32R33; R27 = H, may be substituted, (cyclo)alkyl, alkenyl, groups increasing soly. in alk. developing agent by decompn. with acid; R28, R29, R32 = H, may be substituted, (cyclo)alkyl, alkenyl; R28 + R29 may form a ring; R30-31, R33 = single bond, (cyclo)alkylene, alkenylene, may form bivalent groups with ether, ester, amide, urethane, or ureide groups; Y = I). The compns. are esp. suitable for exposure with far UV. The compns. have excellent dry-etch resistance and give patterns with high sensitivity and resolu.

IT 258518-83-1P

(alkali-developing far UV pos. resists)

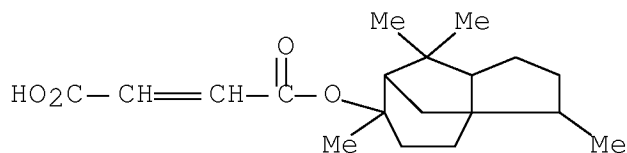
RN 258518-83-1 ZCA

CN 2-Butenedioic acid, mono(octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-6-yl) ester, polymer with 1-(2-chloroethoxy)ethyl 2-methyl-2-propenoate and 2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexanecarboxylic acid (9CI) (CA INDEX NAME)

CM 1

CRN 258518-82-0

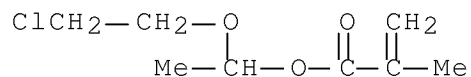
CMF C19 H28 O4



CM 2

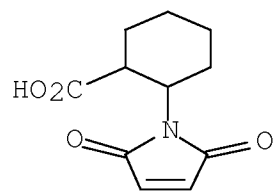
CRN 213470-00-9

CMF C8 H13 C1 03



CM 3

CRN 212580-06-8

CMFC11H13NO4

IT 258518-83-1P
(alkali-developing far UV pos. resists)

L17 ANSWER 8 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 130:345049 ZCA Full-text

TI Positive-working photosensitive composition

IN Aogo, Toshiaki; Sato, Kenichiro

PA Fuji Photo Film Co., Ltd., Japan

50 Jpn. Kokai Tokkyo Koho, 55 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

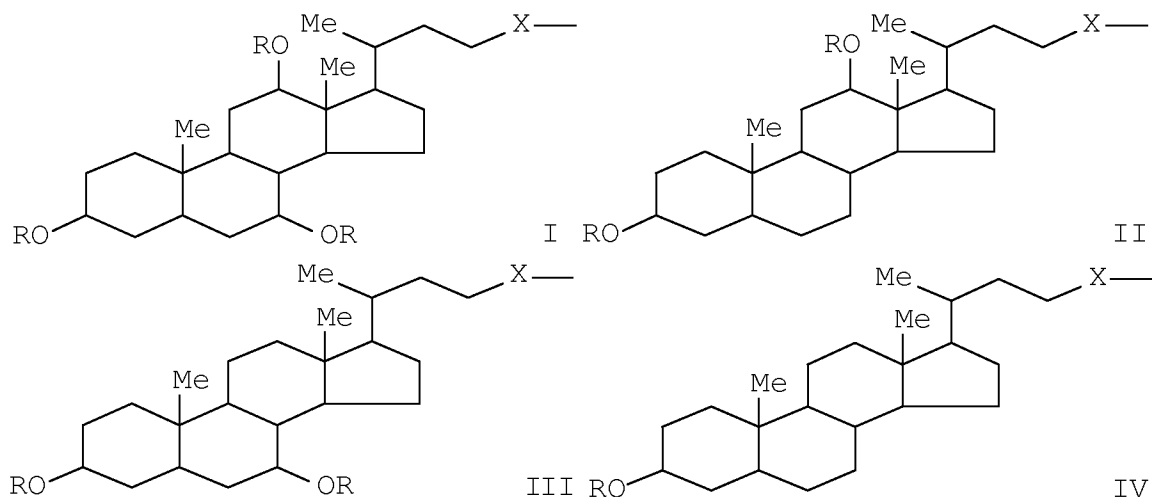
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 11109628	A	19990423	JP 1997-267024	19970930

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JP 3865890          B2      20070110          <--
PRAI JP 1997-267024  19970930  <--
GI

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AB The title compn. contains a compd. generating acid upon active ray or radiation irradiation and a resin having ≥ 1 selected from polycyclic, alicyclic groups I-IV [R = H, (substituted) straight-chain or branched alkyl, cycloalkyl, alkenyl, acyl; X = single bond, divalent alkylene which may have ether, ester, amide, urethane or ureido group, alkenylene, cycloalkylene] and a group which is decomposed by the action of acid to increase the solubility in alkali developing solutions. The compn. shows high photosensitivity in the region of ≤ 250 nm, esp. ≤ 220 nm and provides a high resolution pattern with good dry etch resistance and adhesion to substrate.

IT 223929-99-5P
(photoresist compn. containing acid generating agent and resin having cholic acid ester group and acid decomposable group)

RN 223929-99-5 ZCA

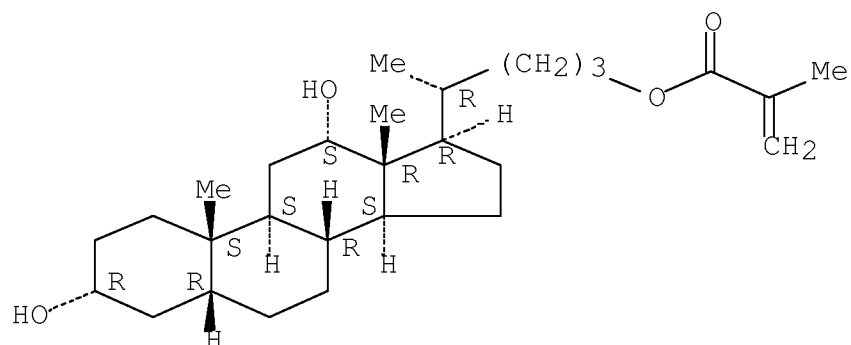
CN Cholan-3,12,24-triol, 24-(2-methyl-2-propenoate), (3 α ,5 β ,12 α)-, polymer with 1-methylcyclohexyl 2-methyl-2-propenoate and tricyclo[3.3.1.1^{3,7}]dec-1-yl hydrogen 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 223929-98-4

CMF C28 H46 O4

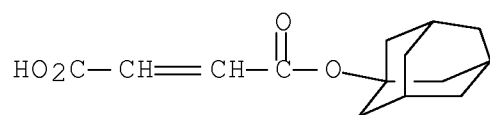
Absolute stereochemistry.



CM 2

CRN 212580-26-2

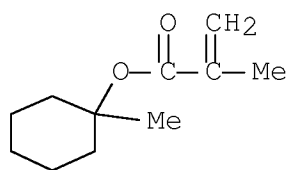
CMF C14 H18 O4



CM 3

CRN 76392-14-8

CMF C11 H18 O2



IT 223929-99-5P

(photoresist compn. contg. acid generating agent and resin having

cholic acid ester group and acid decomposable group)

L17 ANSWER 9 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 129:283430 ZCA Full-text

TI Positive-working photosensitive composition containing acid generator and polymer having adamantyl group

IN Aogo, Toshiaki; Sato, Kenichiro; Tan, Shiro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 10239847	A	19980911	JP 1997-46000	19970228
				<--	
	JP 3797505	B2	20060719		
	US 6042991	A	20000328	US 1998-25451	19980218
				<--	
	US 6416925	B1	20020709	US 2000-497281	20000202
				<--	

PRAI JP 1997-33958 A 19970218 <--

JP 1997-46000 A 19970228 <--

US 1998-25451 A3 19980218 <--

AB The title compn. contains a compd. generating acid upon active ray or radiation irradiation and a resin having ≥ 1 repeating unit containing an adamantyl group I, II, or III [R1, R2, R5, R8, R9 = H, halo, CN, alkyl, haloalkyl; R4, R7, R10 = halo, CN, (substituted) alkyl, (substituted) alkenyl, (substituted) alkynyl, COOR11; R3, R6, R11 = H, (substituted) alkyl, (substituted) monocyclic or polycyclic cycloalkyl, (substituted) alkenyl, group that is decomposed by the action of acid to increase the soly. in alk. developing solns.; X1-5 = single bond, divalent alkylene, cycloalkylene, O, S, NR12R13; R12 = H, alkyl, monocyclic or polycyclic cycloalkyl, alkenyl; R13 = single bond or divalent alkylene, cycloalkylene or alkenylene which may have ether, ester, amido, urethane or ureido group; l, m, n = 0-3] and ≥ 1 group that is decomposed by the action of acid to increase the soly. in alk. developing solns. The compn. shows high sensitivity toward

light of wavelength ≤ 250 nm, esp. ≤ 220 nm, and high soly. in solvents and provides high resolu. patterns with good dry etch resistance.

IT 213819-81-9P 213819-90-0P 213819-94-4P
213819-96-6P 213820-12-3P 213820-15-6P
213820-18-9P

(pos.-working photosensitive compn. contg. acid generator and polymer having adamantyl group)

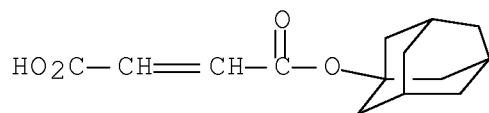
RN 213819-81-9 ZCA

CN 2-Butenedioic acid, monotricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 212580-26-2

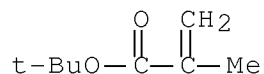
CMF C14 H18 O4



CM 2

CRN 585-07-9

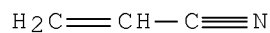
CMF C8 H14 O2



CM 3

CRN 107-13-1

CMF C3 H3 N



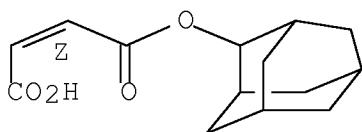
RN 213819-90-0 ZCA
CN 2-Butenedioic acid (2Z)-, 1-ethoxyethyl tricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with tricyclo[3.3.1.1^{3,7}]dec-2-yl hydrogen (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 213819-89-7

CMF C14 H18 O4

Double bond geometry as shown.

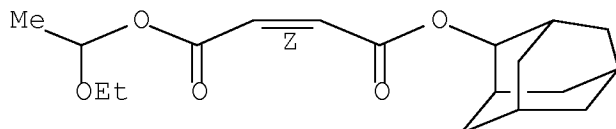


CM 2

CRN 213819-84-2

CMF C18 H26 O5

Double bond geometry as shown.



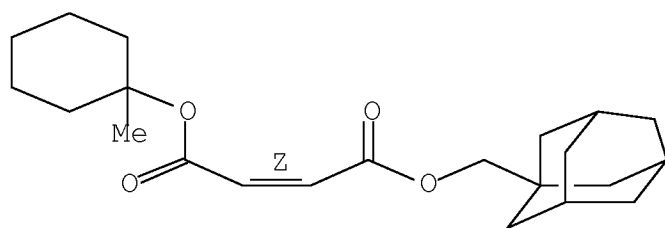
RN 213819-94-4 ZCA
CN 2-Butenedioic acid (2Z)-, 1-methylcyclohexyl tricyclo[3.3.1.1^{3,7}]dec-1-ylmethyl ester, polymer with 2-propenenitrile and (tricyclo[3.3.1.1^{3,7}]dec-1-ylmethyl) hydrogen (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 213819-93-3

CMF C22 H32 O4

Double bond geometry as shown.

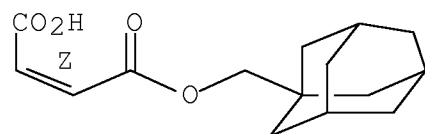


CM 2

CRN 213819-92-2

CMF C15 H20 O4

Double bond geometry as shown.



CM 3

CRN 107-13-1

CMF C3 H3 N



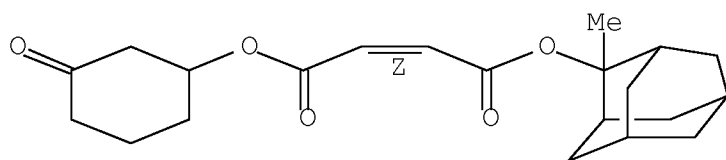
RN 213819-96-6 ZCA

CN 2-Butenedioic acid (2Z)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl
3-oxocyclohexyl ester, polymer with (2-methyltricyclo[3.3.1.1^{3,7}]dec-
2-yl) hydrogen 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

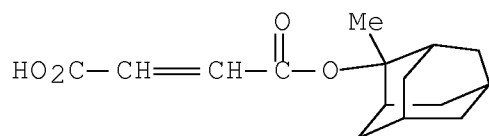
CRN 213819-95-5
CMF C21 H28 O5

Double bond geometry as shown.



CM 2

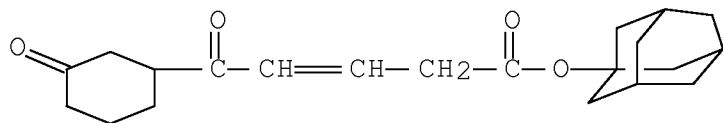
CRN 212580-28-4
CMF C15 H20 O4



RN 213820-12-3 ZCA
CN Butanedioic acid, methylene-, 4-tricyclo[3.3.1.3,7]dec-1-yl ester,
polymer with tricyclo[3.3.1.3,7]dec-1-yl 5-oxo-5-(3-oxocyclohexyl)-
3-pentenoate (9CI) (CA INDEX NAME)

CM 1

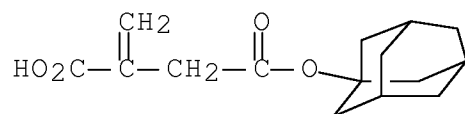
CRN 213820-11-2
CMF C21 H28 O4



CM 2

CRN 213820-10-1

CMF C15 H20 O4



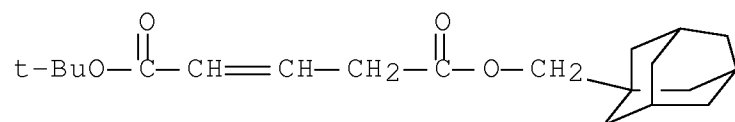
RN 213820-15-6 ZCA

CN 2-Pentenedioic acid, 1-(1,1-dimethylethyl) 5-(tricyclo[3.3.1.1^{3,7}]dec-1-ylmethyl) ester, polymer with 2-propenenitrile and 4-(tricyclo[3.3.1.1^{3,7}]dec-1-ylmethyl) hydrogen methylenebutanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 213820-14-5

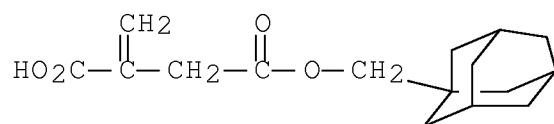
CMF C20 H30 O4



CM 2

CRN 213820-13-4

CMF C16 H22 O4



CM 3

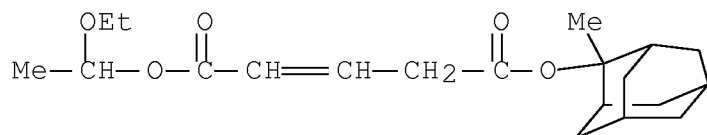
CRN 107-13-1
CMF C3 H3 N



RN 213820-18-9 ZCA
CN 2-Pentenedioic acid, 1-(1-ethoxyethyl) 5-(2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl) ester, polymer with 4-(2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl) hydrogen methylenebutanedioate (9CI) (CA INDEX NAME)

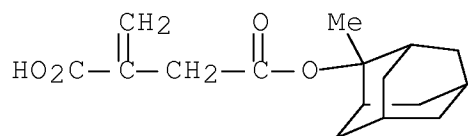
CM 1

CRN 213820-17-8
CMF C20 H30 O5



CM 2

CRN 213820-16-7
CMF C16 H22 O4



IT 213819-81-9P 213819-90-0P 213819-94-4P
213819-96-6P 213820-12-3P 213820-15-6P
213820-18-9P
(pos.-working photosensitive compn. contg. acid generator and polymer having adamantyl group)

L17 ANSWER 10 OF 12 ZCA COPYRIGHT 2008 ACS on STN

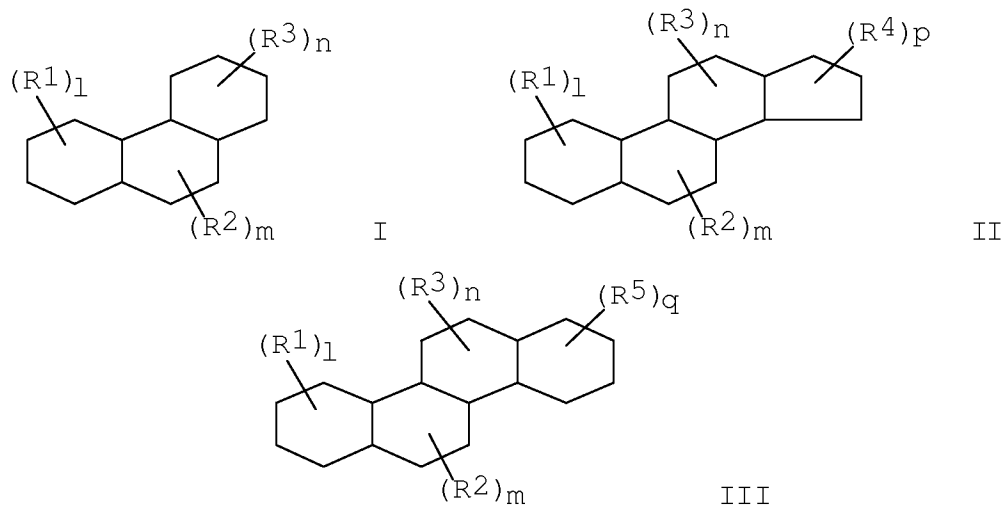
AN 129:267914 ZCA Full-text
 TI Positive-working photosensitive composition with high sensitivity
 toward far ultraviolet ray
 IN Aogo, Toshiaki; Tan, Shiro; Sato, Kenichiro
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 39 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 10232495	A	19980902	JP 1997-33958	19970218
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	JP 3765440	B2	20060412		
	US 6042991	A	20000328	US 1998-25451	19980218
				<--	
	US 6416925	B1	20020709	US 2000-497281	20000202
				<--	
PRAI	JP 1997-33958	A	19970218	<--	
	JP 1997-46000	A	19970228	<--	
	US 1998-25451	A3	19980218	<--	

GI



AB The title compn. contains a compd. generating acid upon active ray or radiation irradiation and a resin having ≥ 1 monovalent polycyclic alicyclic group of I, II, or III [R1-5 = alkyl, cycloalkyl, alkenyl, alkynyl (these groups may be substituted), halo, CN, R6OR7, R8CO2R9, R10CONR11R12, R13OCOR14; R7, R9 = H, alkyl, cycloalkyl, alkenyl (these groups may be substituted), group that is decomposed by the action of acid to increase the soly. in alk. developing solns.; R11, R12, R14 = H, alkyl, cycloalkyl, alkenyl (these groups may be substituted), R11 and R12 may link to form a ring; R6, R8, R10, R13 = single bond, alkylene, alkenylene, cycloalkylene (these groups may be substituted); l, m, n, p, q = 0-5, when l, m, n, p, q ≥ 2 , the plural groups in each R1-5 may be different, when 2 groups in each R1-5 are substituted at the same C atom, they may represent carbonyl or thiocarbonyl group, when 2 groups in each R1-5 are substituted at adjacent C atoms, they may link to form double bond between these C atoms, when ≥ 2 groups in each R1-5 are substituted, they may link to form a ring; I, II, and III may link to the resin at any position in the polycyclic structures] and a group that is decomposed by the action of acid to increase the soly. in alk. developing solns. The compn. shows high sensitivity to UV ray of ≤ 250 nm, esp. ≤ 220 nm and provides high resolution patterns with good profile and dry etch resistance. The compn. gives fine patterns and is useful for manufacture of semiconductor devices.

IT 213470-15-6P

(photoresist compn. containing acid generator and polymer having alicyclic group)

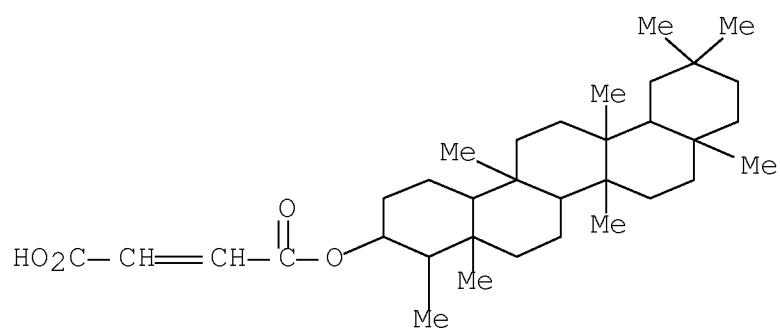
RN 213470-15-6 ZCA

CN 24,25,26-Trinoroleanan-3-ol, 5,9,13-trimethyl-, hydrogen
 2-butenedioate, (4 β ,5 β ,8 α ,9 β ,10 α ,13.alpha
 .,14 β)-, polymer with cyclohexyl hydrogen 2-butenedioate and
 3-oxocyclohexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 213470-14-5

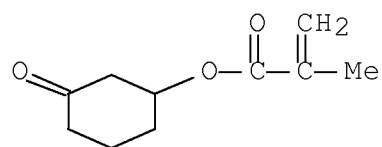
CMF C34 H54 O4



CM 2

CRN 158602-67-6

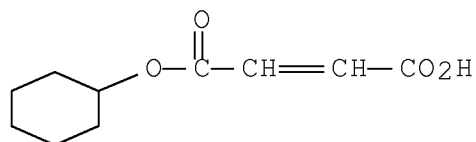
CMF C10 H14 O3



CM 3

CRN 46341-50-8

CMF C10 H14 O4



IT 213470-15-6P
 (photoresist compn. contg. acid generator and polymer having alicyclic group)

L17 ANSWER 11 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 129:223253 ZCA Full-text

TI Positive-working photoresist composition

IN Aogo, Toshiaki; Sato, Kenichiro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 58 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	
PI	JP 10221852	A	19980821	JP 1997-24011	19970206

<--

PRAI JP 1997-24011 19970206 <--

AB The title compn. comprises a resin having ≥ 1 repeating unit contg. groups that are decompd. upon active ray or irradiation to generate acid, ≥ 1 alicyclic group-contg. repeating unit, and ≥ 1 repeating unit contg. groups that are decompd. by the action of acid to increase the soly. in alk. developing solns. The compn. shows high sensitivity toward light of wavelength ≤ 250 nm, esp. ≤ 220 nm, and high dry etch resistance and provides high resolu. resist patterns with good profile independent of the elapse of time from exposure to post-bake.

IT 212580-27-3P 212580-30-8P 212580-37-5P
 212580-40-0P

(photoresist compn. contg. polymer having acid-generating group, alicyclic group, and alkali-sol. group)

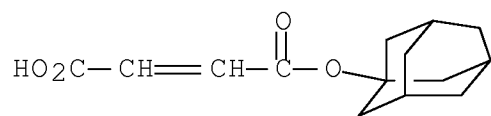
RN 212580-27-3 ZCA

CN 2-Butenedioic acid, monotricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with 3-[[[(2,4-dinitrophenyl)methoxy]sulfonyl]propyl 2-methyl-2-propenoate and 5-oxo-2-cyclohexen-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 212580-26-2

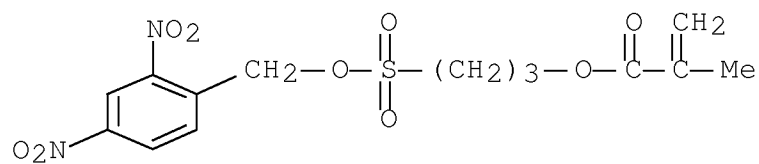
CMF C14 H18 O4



CM 2

CRN 212580-25-1

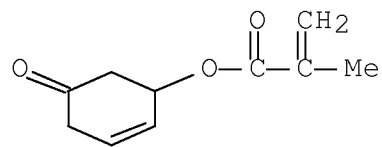
CMF C14 H16 N2 O9 S



CM 3

CRN 212579-99-2

CMF C10 H12 O3



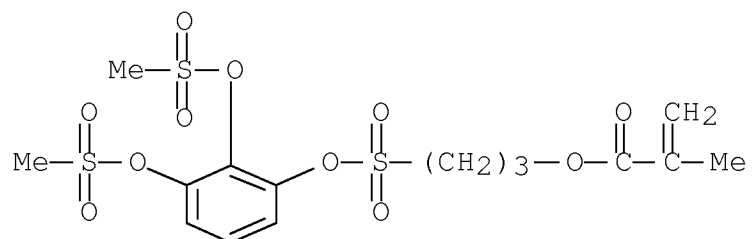
RN 212580-30-8 ZCA

CN 2-Butenedioic acid, mono(2-methyltricyclo[3.3.1.13,7]dec-2-yl) ester, polymer with 3-[[2,3-bis[(methylsulfonyl)oxy]phenoxy]sulfonyl]propyl 2-methyl-2-propenoate and tetrahydro-4-methyl-2-oxo-2H-pyran-4-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 212580-29-5

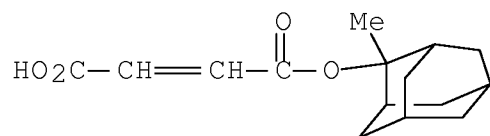
CMF C15 H20 O11 S3



CM 2

CRN 212580-28-4

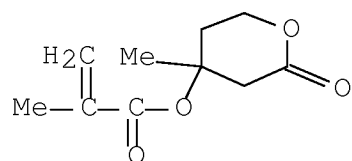
CMF C15 H20 O4



CM 3

CRN 177080-66-9

CMF C10 H14 O4



RN 212580-37-5 ZCA

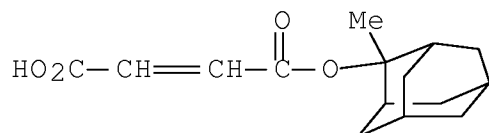
CN 2-Butenedioic acid, mono(2-methyltricyclo[3.3.1.13,7]dec-2-yl)

ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate and
 1-[[(trifluoromethyl)sulfonyl]oxy]-1H-pyrrole-2,5-dione (9CI) (CA
 INDEX NAME)

CM 1

CRN 212580-28-4

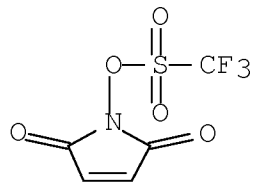
CMF C15 H20 O4



CM 2

CRN 135057-84-0

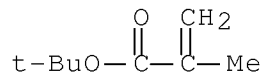
CMF C5 H2 F3 N O5 S



CM 3

CRN 585-07-9

CMF C8 H14 O2



RN 212580-40-0 ZCA

CN Cholan-24-oic acid, 3-[(3-carboxy-1-oxo-2-propenyl)oxy]-,

(3 α ,5 β)-, polymer with 1-cyclopropyl-1-methylethyl
2-methyl-2-propenoate and 1-[[[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)ethyl]sulfonyl]oxy]-3,4-dimethyl-1H-pyrrole-2,5-dione (9CI) (CA
INDEX NAME)

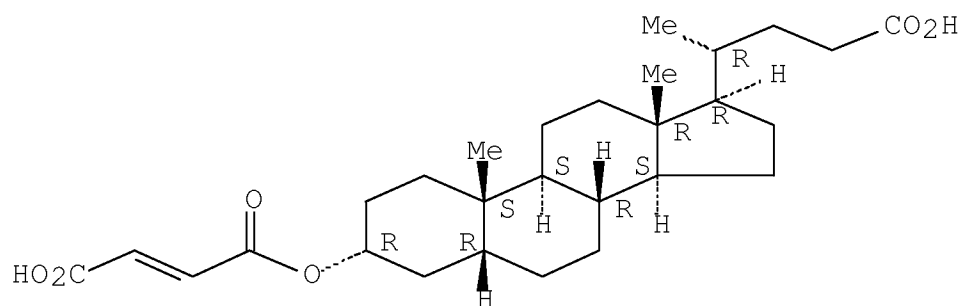
CM 1

CRN 212580-39-7

CMF C28 H42 O6

Absolute stereochemistry.

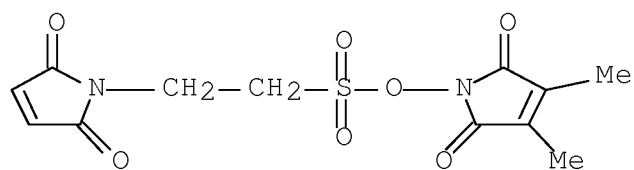
Double bond geometry unknown.



CM 2

CRN 212580-38-6

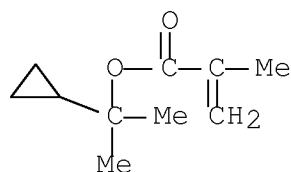
CMF C12 H12 N2 O7 S



CM 3

CRN 113686-68-3

CMF C10 H16 O2



IT 212580-27-3P 212580-30-3P 212580-37-5P
212580-40-0P

(photoresist compn. contg. polymer having acid-generating group,
alicyclic group, and alkali-sol. group)

L17 ANSWER 12 OF 12 ZCA COPYRIGHT 2008 ACS on STN

AN 119:250616 ZCA Full-text

TI The study on polyesters by NMR spectrometry. IV. The thermal
polymerization on dihydrohydroxy- and tetrahydrohydroxy-exo-
dicyclopentadienyl maleates

AU Tanaka, Hisao; Kageyama, Akira; Uchigasaki, Isao; Sugitani, Hatsuo;
Mukoyama, Yoshiyuki

CS Yamazaki Works, Hitachi Chem. Co., Ltd., Hitachi, 317, Japan

SO Nippon Kagaku Kaishi (1993), (9), 1077-84

CODEN: NKA KB8; ISSN: 0369-4577

DT Journal

LA Japanese

AB The thermal polymn. of dihydrohydroxy-exo-dicyclopentadienyl and
tetrahydrohydroxy-exo-dicyclopentadienyl maleates was carried out at
220° in the absence of any initiator to investigate quant. the
mechanism of polymer formation. The characteristics of the thermal
polymn. were discussed mainly with regarded to the av. mol. wt.,
mol.-wt. distribution, and 1H-NMR spectra of the products before and
after hydrolysis. It seems that the presence of a double bond within
the skeleton of dicyclopentadiene is necessary for the thermal
polymn. to occur. This thermal polymn. is initiated by both radical
chain reaction of the isomerized fumaroyl double bond and ene-
reaction of the fumaroyl double bond with the allylic double bond in
the cyclopentene ring. The radical chain reaction terminated rapidly
at a d.p. <6. On the other hand, the ene-reaction trends to progress
with increasing mol. wt. of the polymer produced.

IT 151305-34-9P

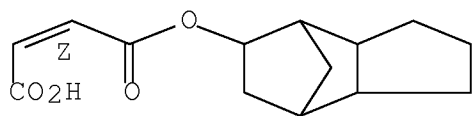
(prepn. and characterization of)

RN 151305-34-9 ZCA

CN 2-Butenedioic acid (2Z)-, mono(octahydro-4,7-methano-1H-inden-5-yl)
ester, homopolymer (9CI) (CA INDEX NAME)

CRN 151305-33-8
CMF C14 H18 O4

Double bond geometry as shown.



IT 151305-34-9F
(prepn. and characterization of)